

A REVIEW OF THE TACHYPORINE GENUS *EUCONOSOMA*
CAMERON (COLEOPTERA: STAPHYLINIDAE) WITH A
DESCRIPTION OF A NEW SPECIES FROM NEPAL

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ABSTRACT

The genus *Euconosoma* Cameron is reviewed. One new species, *E. nepalensis*, is described from Nepal. *Conosoma pictum* Bernhauer is transferred to *Euconosoma*. *Euconosoma elegans* Cameron is placed in synonymy with *E. pictum*.

The genus *Euconosoma* was described by Cameron (1918) to include only his new species *E. elegans*, herein treated as a junior synonym of *Conosoma pictum* Bernhauer (1903). Cameron compared the genus to *Conosoma* (now *Sepedophilus*) but placed it into a new group (=tribe) the Euconosomini. One specimen of a new species of *Euconosoma* was collected by the 1967 Canada Nepal Expedition and is herein described.

All methods and terminology used in this paper have been described in my revision of the North American species of *Sepedophilus* (in press). The units used to express relative lengths of antennal and tarsal segments are equal to 0.01 mm.

I thank Mr. Henry Dybas, Field Museum of Natural History, Chicago, for the loan of specimens from the Bernhauer collection, Mr. Go Sato for making the habitus and line drawings, and my colleagues Drs. E. C. Becker, D. E. Bright, and Aleš Smetana for criticism of the manuscript.

Euconosoma Cameron

Euconosoma Cameron 1918:215 [type-species *Euconosoma elegans* Cameron, junior synonym of *Conosoma pictum* Bernhauer].

The genus was adequately characterized by Cameron so the description need not be repeated. The following diagnosis distinguishes members of the genus from all other Tachyporinae.

Body with facies of *Sepedophilus*, strongly convex; surface distinctly and moderately densely pubescent; bicolored. Elytra with series of long lateral bristles (Fig. 1); elytral epipleura subacute (see Campbell, in press), not visible from lateral view. Abdomen with dense, long bristles on all tergites and sternites. Antenna slightly compressed laterally, with segments 5-10 becoming gradually wider approaching apex. Maxillary palpus 4-segmented with apical segment triangular, slightly narrower at base than segment 3, then sides evenly tapering to acute apex. Labial palpi (Fig. 2) 3-segmented with apical segment greatly widened and compressed laterally, width greater than length of basal 2 antennal segments. Mesosternum (Fig. 3) evenly convex, without trace of median carina. Anterior tibia (Fig. 4) with dense comb of coarse, even spines along outer margin.

Remarks. *Euconosoma* and *Sepedophilus* superficially are very similar in appearance, readily distinguished from all other Tachyporinae by the strongly convex body, the distinctly pubescent body surface, and the unique comb of spines along the outer margin of the protibia. *Euconosoma* is distinguished from *Sepedophilus* by the greatly expanded apical segment of the labial palpus and by the lack of a mesosternal carina.

The presence of long bristles on the sides of the elytra and the distinctive testaceous color with strongly contrasting black markings make *Euconosoma* similar to species of the *scriptus* group of *Sepedophilus*. In addition to the generic differences cited above, species of *Euconosoma* are considerably larger than any of the species of the *scriptus* group (which are less than 2 mm long from anterior margin of head to apex of elytra).

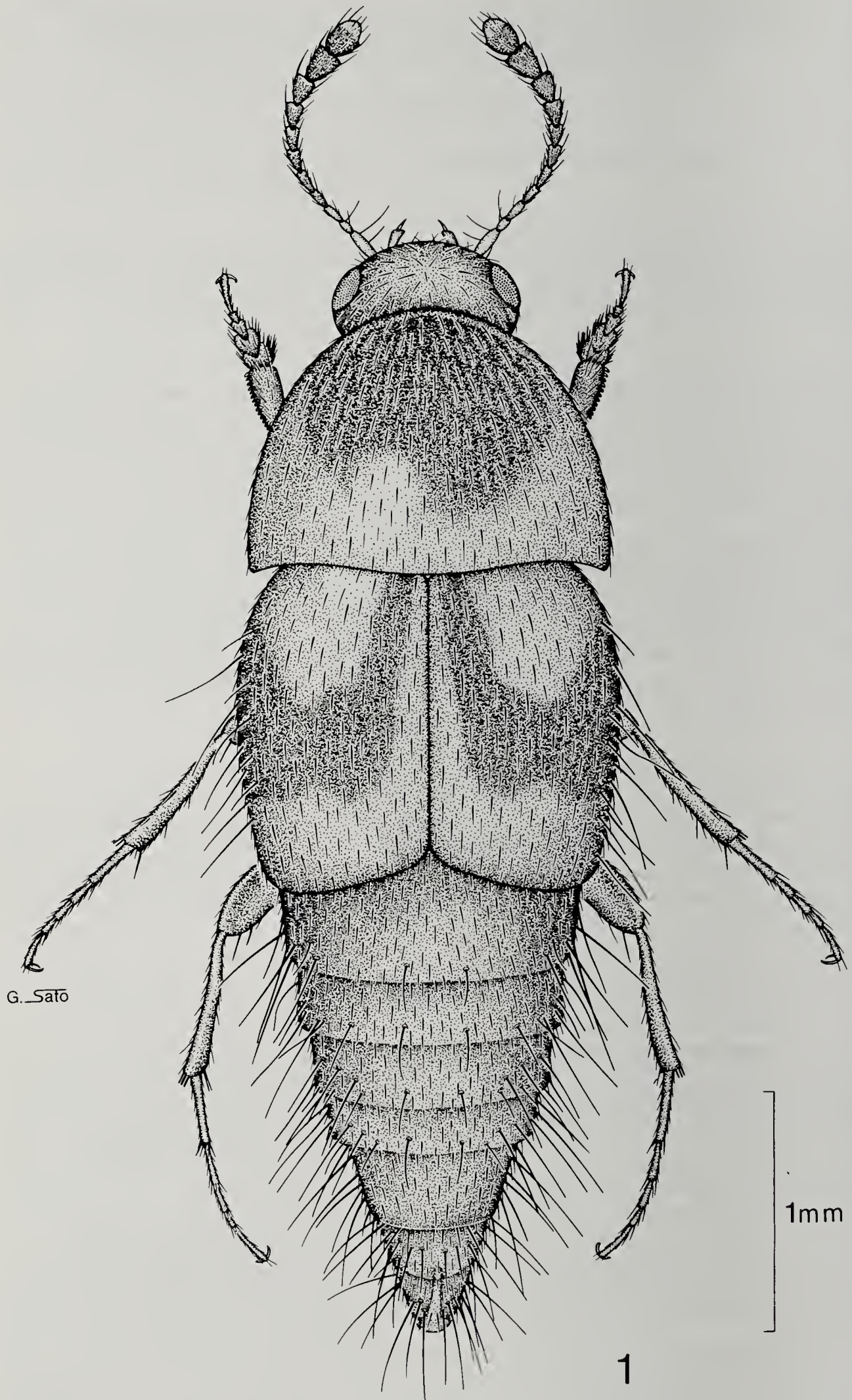
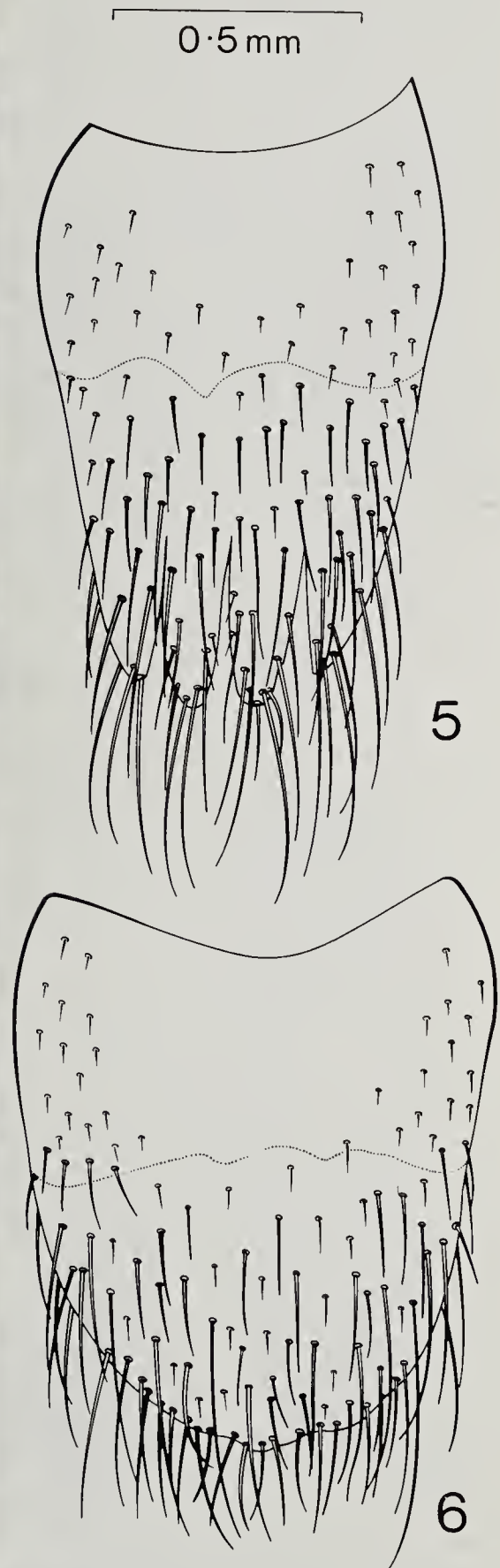
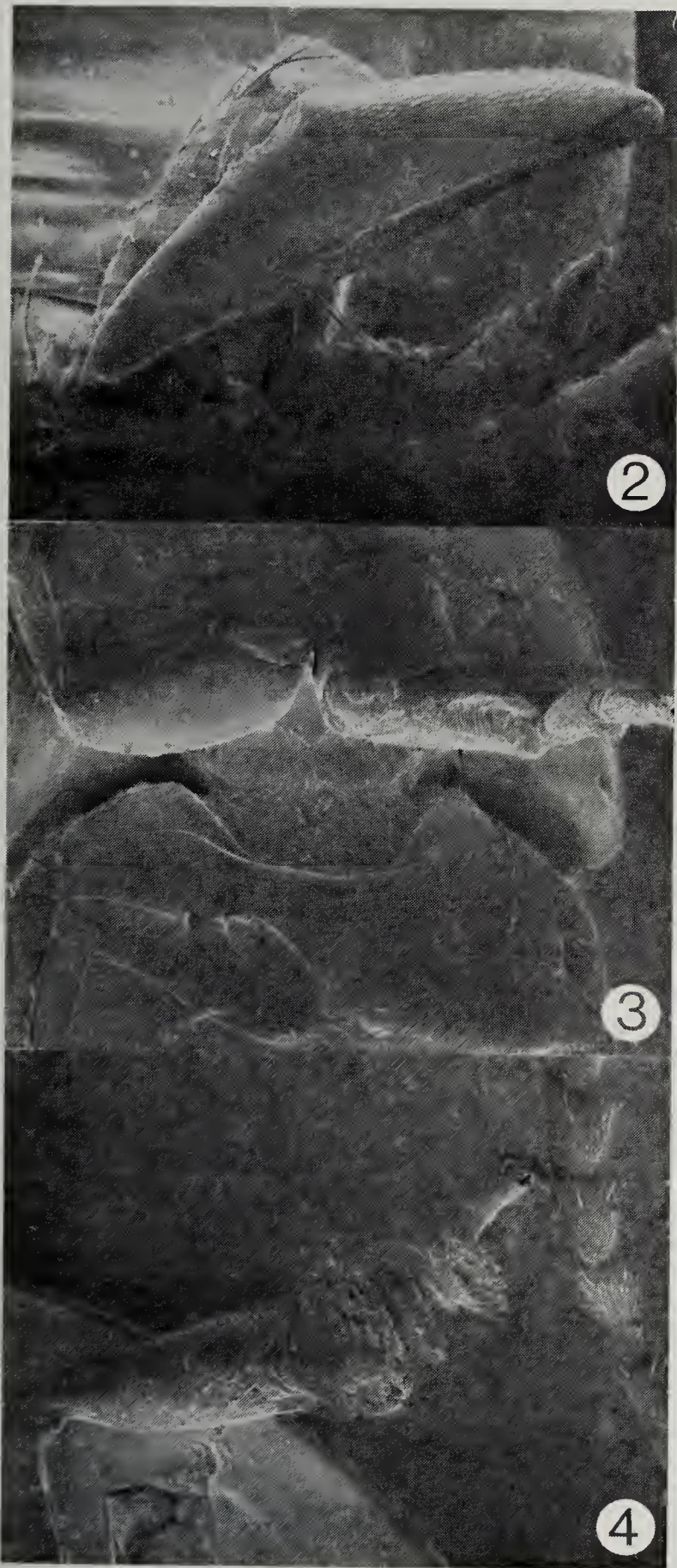


Fig. 1. Habitus of *Euconosoma nepalensis*.

Euconosoma nepalensis Campbell, **new species**

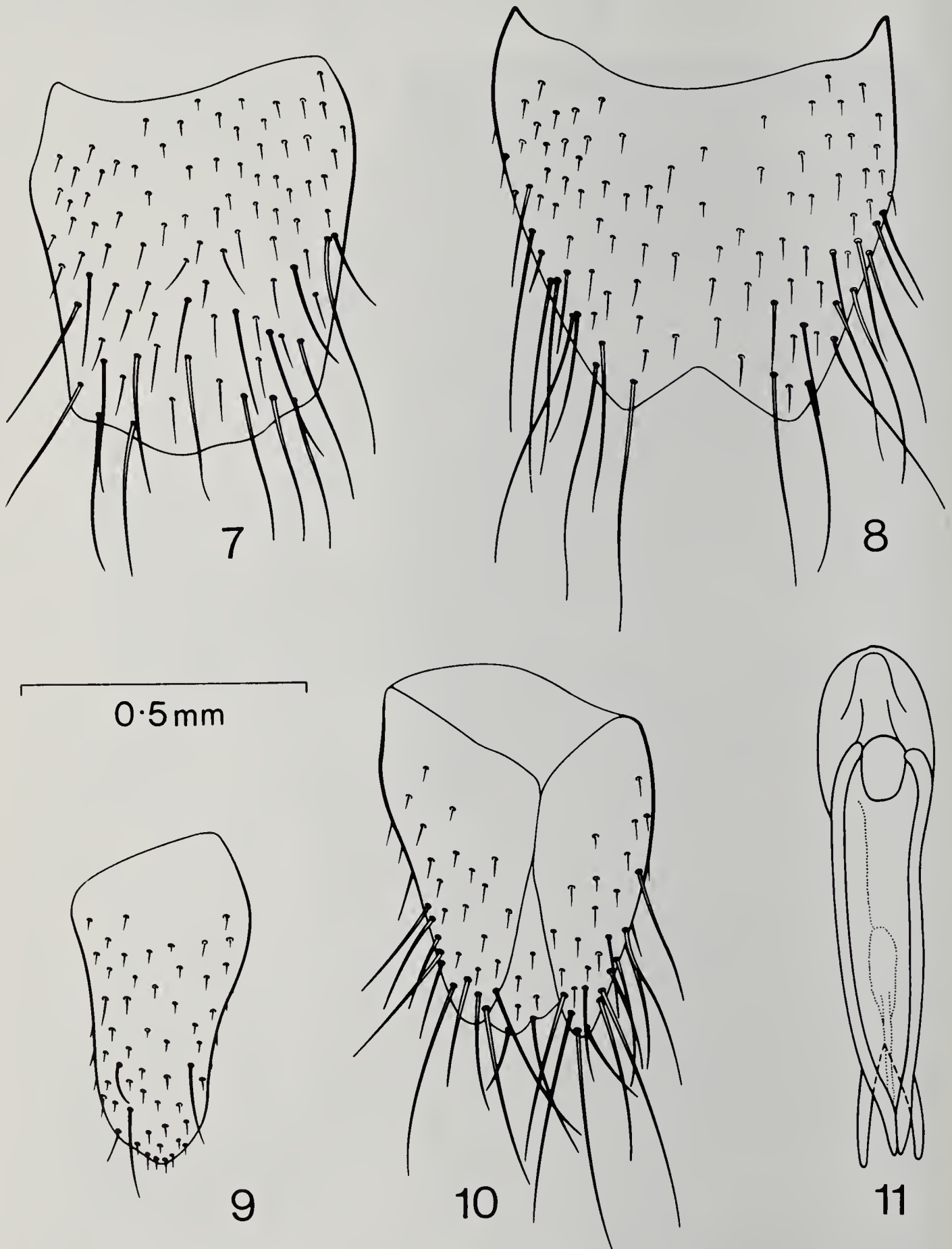
Figs. 1, 7-11

Body (Fig. 1) strongly convex, broadly elongate-oval, broadest across pronotum near base and across base of elytra; sides forming almost continuous curve from near base of pronotum around anterior margin of head, posteriorly sides almost evenly tapering from base of elytra to apex of abdomen. Testaceous; central portion



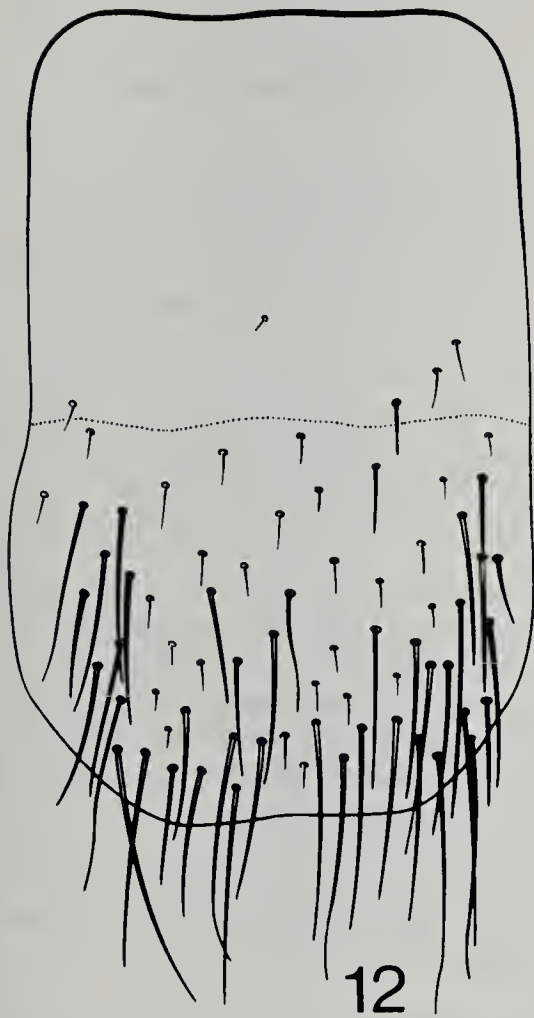
Figs. 2-6, *Euconosoma pictum*, female: 2, labial palpus; 3, mesosternum; 4, anterior leg; 5, eighth tergite; 6, eighth sternite.

of pronotal disc, large crescent-shaped macula extending from scutellum to just behind humeral angles of each elytron, apical 3/4 of abdominal segment 3, segments 4-6, segment 8, metasternum, and segments 4-11 of antenna piceous. Surface of head and pronotum shining, without microsculpture; finely, moderately sparsely punctate. Pubescence fine, moderately long, testaceous. Length from front of head to apex of elytra 2.9 mm.

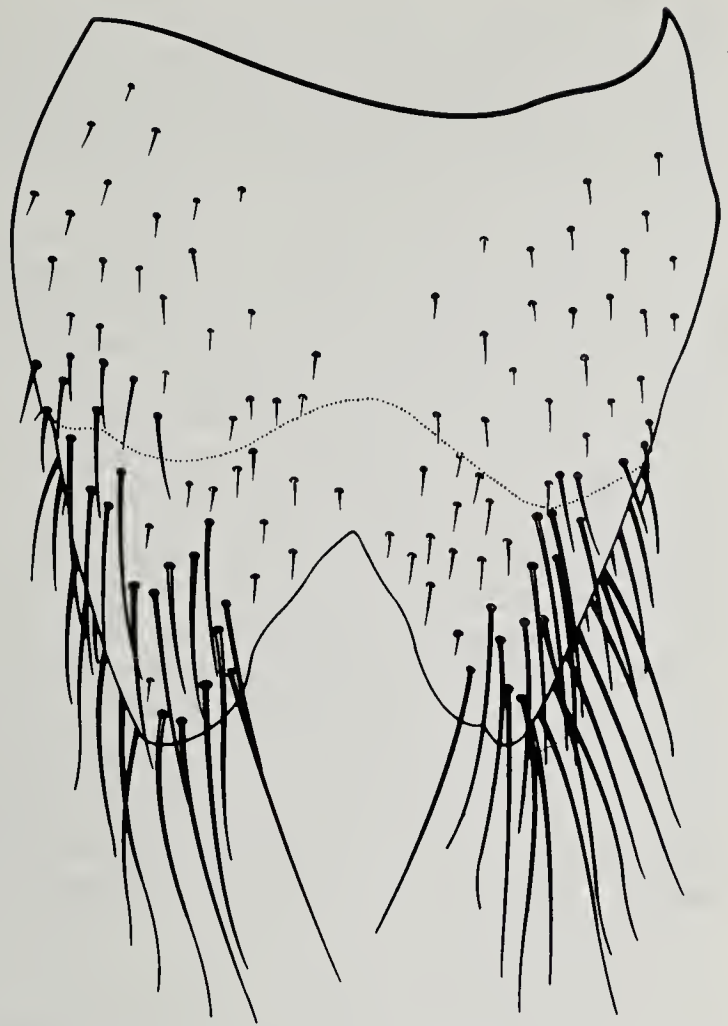


Figs. 7-11, *Euconosoma nepalensis*, male: 7, eighth tergite; 8, eighth sternite; 9, ninth tergite; 10, ninth sternite; 11, genitalia.

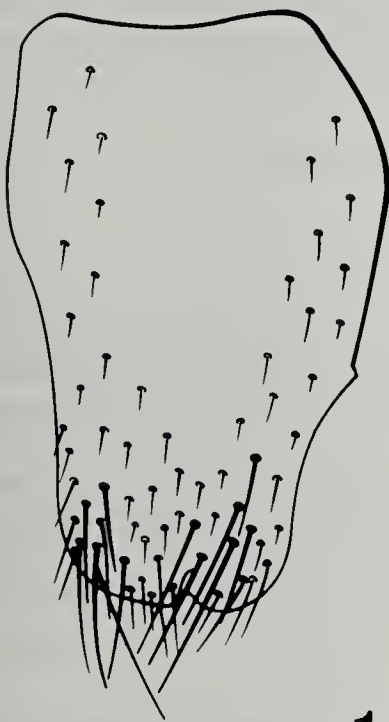
Figs. 12-16, *Euconosoma pictum*, male: 12, eighth tergite; 13, eighth sternite; 14, ninth tergite; 15, ninth sternite; 16, genitalia.



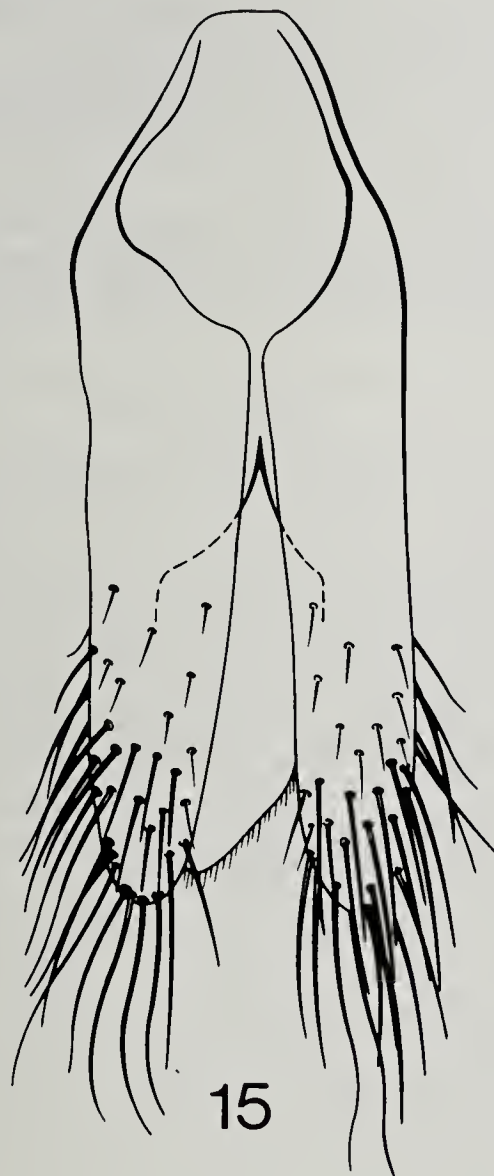
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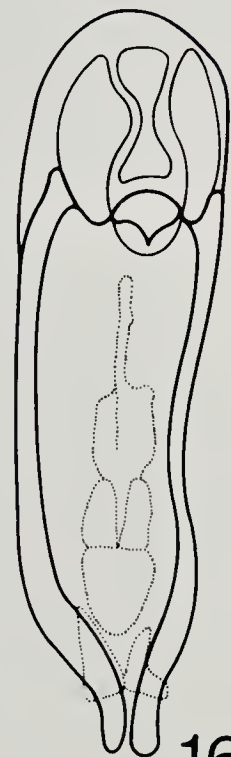
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14



15



16

0.5 mm

Maxillary palpus with apical segment subequal in length to penultimate and slightly more than half as wide; sides narrowed from base to acute apex. Antenna distinctly compressed laterally; segments 3-10 subequal in length, becoming distinctly broader approaching apex; segment 3 elongate ($l/w=14/6$); segment 4 elongate triangular ($l/w=15/10$), segment 10 triangular ($l/w=14/14$); segment 11 asymmetrical, surface broadly, concavely excavate on outer side, slightly longer than wide ($l/w=16/13$).

Pronotum transverse ($l/w=1.4/1.65$ mm), with basal margin broadly convex, basal angles broadly rounded; apical margin broadly emarginate with anterior angles acute. Elytra subequal in length to pronotum; disc with row of long bristles along lateral margin and row of slightly shorter bristles just mediad of outer row (Fig. 1); elytral epipleura subacute, narrow, tapering from base and not quite extending to apex of elytra, glabrous. Fully winged.

Abdomen with numerous long bristles (see Fig. 1); tergite 7 with apical margin bordered by white seam. Procoxa with 3 short, coarse spines on apex. Protibia without apical spurs or ctenidium. Mesofemur with 1 long and 2 shorter bristles on inner side near apex; mesotibia with 2 long, subequal apical spurs, apex with complete apical ctenidium; ratio of lengths of mesotarsal segments 22: 12: 10: 6: 21. Metatarsal segments with relative lengths 39: 15: 12: 7: 19.

Male. Protarsus with basal 3 segments broadly dilated. Tergite 8 (Fig. 7) uniformly piceous; apical margin broadly bisinuate. Sternite 8 (Fig. 8) uniformly piceous; apical margin broadly, deeply, triangularly emarginate. Tergite 9 (Fig. 9) with apical margin broadly triangular; sternite 9 as in figure 10. Genitalia (Fig. 11) 0.93 mm. long; parameres moderately broad near middle, then curved towards middle and evenly tapering to acutely rounded apex; processes of median lobe divergent apically, extending slightly beyond level of apices of parameres.

Female. Unknown.

Type. Holotype, male, mounted on card with labels as follows: NEPAL, Ktmd. [Katmandu] Godavari 6000', 7-13 Aug. 1967, Can. Nepal Exped./HOLOTYPE [male sign] *Euconosoma nepalensis*, J. M. Campbell CNC No. 13722. The specimen is deposited in the Canadian National Collection, Ottawa.

Remarks. *Euconosoma nepalensis* is superficially similar to *E. pictum* (Bernhauer) but is distinguished by its smaller size, different color pattern, different shape of male terminalia, and the presence of 2 rows of bristles along the outer margin of each elytron.

Nothing is known of the habits of this species, but the presence of well developed ctenidia on the legs, the protibial combs, and the large number of bristles on the legs imply that the species is mycetophilous as are species of *Sepedophilus*.

Euconosoma pictum (Bernhauer), **new combination**
Figs. 2-6, 12-16

Conosoma pictum Bernhauer, 1903, p. 25 [type locality, Sumatra].

Euconosoma elegans Cameron, 1918, p. 216 [type locality, Borneo, Quop, W. Sarawak]. **New synonymy.**

This species was adequately described by Cameron (1918); the following diagnosis and additional characters distinguish the species. Testaceous; temples and posterior margin of head, central portion of pronotal disc, elytra except middle of base and sutural area, middle of abdominal tergite 4, segments 5 and 6, basal half of segment 7, apical half of segment 8, and antennal segments 5-10 black. Length from front of head to apex of elytra 3.4-3.8 mm. Antenna distinctly compressed laterally; segments 4-10 becoming gradually shorter and wider approaching apex; segment 3 elongate ($l/w=25/7$); segment 4 elongate ($l/w=28/10$); segment 5 triangular ($l/w=20/12$); segment 10 transverse-triangular ($l/w=15/17$); segment 11 asymmetrical, surface flattened on outer side, slightly longer than wide ($l/w=20/15$).

Pronotum transverse ($l/w=1.80/2.15$ mm). Elytra distinctly shorter than pronotum (length 1.25 mm); disc with single row of 8-10 moderately long bristles along outer margin; elytral epipleura subacute, moderately broad, tapering from base for basal half then subparallel to apex of elytra, glabrous. Fully winged. Abdomen lacking bristles on central portions of tergites 3-7; apical margin of tergite 7 bordered by white seam. Procoxa with anterior surface moderately densely covered with short spines. Protibia without apical spurs or ctenidium. Mesofemur as in *nepalensis*; mesotibia with complete apical ctenidium, with 1 long and 1 short tibial spur;

ratio of lengths of mesotarsal segments 16: 5: 4: 3: 12. Metatarsal segments with relative lengths 18: 6: 4: 2: 12.

Male. Protarsus with basal 4 segments broadly dilated. Tergite 8 (Fig. 12) with apical half piceous, apical margin broadly truncate. Sternite 8 (Fig. 13) with apical half piceous; apical margin broadly, deeply, triangularly emarginate. Tergite 9 (Fig. 14) with apical margin truncate; sternite 9 as in figure 15. Genitalia (Fig. 16) 1.08 mm. long; parameres abruptly curved towards middle just before apex, apical portion subparallel with apices evenly convex; processes of median lobe convergent apically, not extending to level of apices of parameres.

Female. Tergite 8 (Fig. 4) 4 lobed; median lobe extending slightly beyond level of apices of lateral lobes; median emargination extending to base of lobes. Eighth sternite (Fig. 5) with apical margin convex, slightly produced medially, with 15 apical fimbriate setae which are obscured by dense bristles of disc.

Material examined. I examined 3 specimens from the Bernhauer collection, Field Museum of Natural History, Chicago. Two of these are syntypes of *pictum* Bernhauer and the 3rd is from the type locality of *elegans* Cameron. I designate a male with the following labels as lectotype of *pictum*: Dohrn, Sumatra, Soekaranda/pictum Brh. det. Bernh./Chicago NH Mus. M. Bernhauer Collection/LECTOTYPE male *Conosoma pictum* Bernh., desig. 1975, J. M. Campbell/*Euconosoma pictum* Bernh. det. 1975, J. M. Campbell. The 2nd syntype is a male with the same data as the lectotype. The 3rd specimen examined is labelled as follows: Quop, W. Sarawak, G. E. Bryant, 4-4-16/G. Bryant Col. 1919-147/*Conosoma pictum* Brnh./Chicago NH Mus. M. Bernhauer Coll.

Remarks. Although I made no effort to study the type material of *E. elegans* Cameron, there can be no doubt about the identity of the species. The single female examined was from the type locality and collected by the same collector as the specimen described by Cameron. The specimens at hand match the excellent description given by Cameron in every respect.

Key to species of *Euconosoma* Cameron

1. Apical segment of antenna piceous; each elytron with large, crescent-shaped black macula extending from scutellum to just behind humeral angle; length 2.9 mm (from front of head to apex of elytra); known from Nepal..... *E. nepalensis* new species
- 1'. Apical segment of antenna testaceous; each elytron with inner half of basal area and sutural area testaceous, remainder black; length 3.4-3.8 mm (from front of head to apex of elytra); known from Malaysia.....
..... *E. pictum* (Bernhauer)

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